I-95 at I-10 Interchange Operational Improvements

TECHNICAL PROPOSAL
VOLUME 1 OF 3

FPN 433036-1-52-01 & 433036-1-56-01
FAPN 0955-314-I
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INTRODUCTION

The construction of the I-10/I-95, "Big I" Interchange was the culmination of many years of planning and design by FDOT and the City of Jacksonville. This national award winning mega-project, constructed by Archer Western (AW) with GAI Consultants (GAI) providing CEI services, tied together several major projects to provide Jacksonville with modern and efficient highway connections in the heart of the City. Archer Western and GAI are excited to reprise their "Big I" efforts, this time as a design-build team focused on increasing the capacity of the interchange, addressing weaving, adding a multi-use path to the Fuller Warren Bridge, and honoring the Department's programmed budget. In addition to meeting these goals, the AW Team will prepare this critical junction for express lanes which will soon be built along I-10 and ultimately along I-95 to the north and the south.

We know the project better than anyone.

- The AW Team has earned more than 12 years of experience within the project boundaries, having built the existing interchange and the on-going Overland Bridge project
- Through the Alternative Technical Concept (ATC) and proposal processes we have furthered our in-depth understanding of the technical aspects of this interchange and efficiencies required to match available funding
- We have overcome complex challenges on our prior projects by partnering with FDOT, and the same local agencies, communities and stakeholders that will influence the project's success

We understand the commitments and stakeholders. The AW Team recognizes that the I-10/I-95 Operational Improvements Project has been developed in close coordination with numerous stakeholders including Riverside Avondale Preservation (RAP) and the Riverside Arts Market (RAM). Having built the "Big I", the AW Team possesses a unique understanding of the needs and concerns of these stakeholders and is thus best positioned to ensure the Department's commitments are met. As demonstrated on the Overland Bridge Project, the AW Team has a proven approach to minimize impacts to vibration sensitive properties.

We understand the environment. The AW Team recognizes the very high volume of traffic that moves through this interchange on a daily basis and has utilized the ATC process to provide alternate alignments that reduce full roadway reconstruction, preserving recently constructed sections of the Big "I". This allows for a sequence of construction that maintains the quality of existing traffic operations while minimizing the number of phases and associated traffic shifts or diversions. These ATCs include structural alternatives that avoid the major I-95 northbound (NB) and southbound (SB) bridge modifications at College St and the associated maintenance of traffic impacts. The AW Team's proposed bridge structures at these locations will be constructed completely outside of existing traffic, eliminating shifts or reductions in shoulder widths during construction.

The AW Team partnered with FDOT to develop effective ATCs that solve operational, constructability, and safety concerns while reducing construction costs and duration as illustrated above in Figure 1.

The AW Team's approach:

Improves Constructability

- **A** ATC #1: Allows construction of Ramp T improvements without shifting I-95 traffic
- **B** ATC #1: Permits pile driving without major bridge demolition/reconstruction
- **C** ATC #2: Eliminates reconstruction of Ramp L and all associated traffic shifts
- **D** ATC #2: Reduces complex bridge widening on Ramp T
- **E** ATC #12: Reduces bridge work within water and eliminates it under Ramp A

Improves Operations and Safety

- **F** ATC #1: Maintains current alignment of I-95 and associated lane/joint positions while eliminating RFP radius reduction
- **G** ATC #2: Increases acceleration lengths and gore separation
- **H** ATC #6: Eliminates the inside merge
- **I** ATC #6: Reduces limits of the Stopping Sight Distance (SSD) Design Exception by 50%
- **J** ATC #6: Creates a positive departure angle onto Ramp V from Ramp T, avoiding unintended exiting

Reduces Impacts

- **K** ATC #1: Avoids impacts to existing utilities and stormwater pipes
- **L** ATC #1: Moves pile driving activities (and associated vibrations) further away from the historic masonry schoolhouse
- **M** ATC #2: Eliminates Ramp L reconstruction
- **N** ATC #12: Reduces work within water and improves viewshed from Nemours

Reduces Costs

- **O** ATC #1: Eliminates 9,200 SF of Bridge widening on I-95 NB
- **P** ATC #1: Eliminates removal of existing bridge deck to install pier
- **Q** ATC #2: Maximizes re-use of existing pavement and reduces construction by 7,606 SY (35%)
- **R** ATC #6: Reduces length of Ramp V Flyover, eliminating 12,121 SF (39%) of complex bridge construction
- **S** Eliminates 8,530 SF of complex bridge widening on Ramp T
- **T** ATC #12: Reduces the pedestrian bridge structure and Nemours sidewalk reconstruction

Simplifies Maintenance

- **U** ATC #6: Reduces length of Ramp V flyover and associated bridge maintenance
- **V** ATC #6: Uses concrete FIBs in lieu of steel
- **W** ATC #12: Eliminates pedestrian bridge span within the "splash zone"

The AW Concept meets all commitments. The community has always been a major partner in design and construction of all projects surrounding this interchange. Key stakeholders include the Riverside Arts Market (RAM), Riverside Avondale Preservation (RAP), permitting agencies, medical facilities, local businesses and the City of Jacksonville. The Department has collaborated with these groups to develop a concept that harmonizes with the community. The AW Team's design meets all commitments made by the Department throughout the project's development including but not limited to:

- Noise walls in accordance with Appendix G
- A shared-use path over the St Johns River with two connections on the east side of the river
- Maintenance of clearing and grubbing limits as outlined in the RFP
- Aesthetic enhancements and landscape requirements outlined in Appendices M, Q and R
- Landscape salvaging per Appendix R
- A new parking area west of Riverside Ave and provides a temporary driveway and the two new pedestrian crosswalks prior to 11/1/2017
- Pedestrian, way-finding, and local street improvements
- Maintenance of parking (no more than 20 spaces impacted during the day and 96 spaces at night)
- Meeting commitments to the American Red Cross Building
- Restoration of dog park between College St and Park St at completion of project
- Upgrading existing High Mast lighting to LED within the interchange
- Replacing 6" sanitary sewer line alongside the American Red Cross Building

DESIGN

Alternative Technical Concepts (ATCs)

The AW Team has worked with Department staff on developing multiple ATCs in an effort to improve constructability, improve operations, reduce impacts during construction and reduce costs.

ATC #1 – Maintain the existing I-95 alignment while adding an additional lane to Ramp T

The most technically challenging feature of this project is the widening of the I-95 NB to I-10 westbound (WB) ramp structure (Ramp T) where it crosses over the I-95 NB and SB mainline – a third level structure that also spans College St. The RFP concept calls for major modifications to the I-95 bridges over College St to shift the mainline traffic, making room for new columns needed to widen the Ramp T structure. Recognizing the severe impacts to traffic during construction that such an approach would cause and the unfavorable roadway alignment that results from the shift, the AW Team developed the alternative alignment and structural solution depicted in ***Figures 2 and 3.***

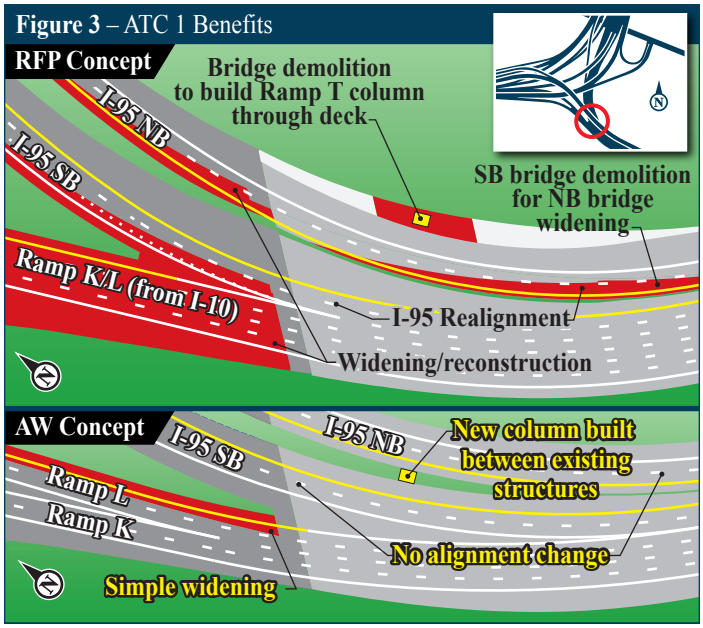
This solution offers numerous benefits by:

- Eliminating the permanent I-95 NB and SB realignment and associated road and bridge reconstruction required by the RFP concept ***(See Figure 3)***
- Maintaining I-95 SB alignment, avoiding reprofiling and reconstruction of Ramps K/L to make the terminal area meet design criteria
- Maintaining lane lines along existing concrete joints, reinforcing lane alignments and improving maintenance

Figure 2 – Ramp T Solution

- Simplifying construction by placing the new column and foundation in the space between I-95 NB and SB, avoiding the removal of a portion of bridge deck to construct the Ramp T pier and deep foundations required in the RFP Concept ***(See Figure 3)***
- Eliminating the widening of the adjacent I-95 NB bridge and associated temporary traffic shifts ***(See Figure 3)***
- Avoiding two large stormwater pipes (36" and 60") that lie adjacent to Pier 9 (location verified by the AW Team) which could be heavily impacted by construction of the RFP concept
- Moving pile driving activity further away from the Annie B. Lytle Elementary School building, thereby reducing the risk of vibration damage to this historic structure

Figure 3 – ATC 1 Benefits

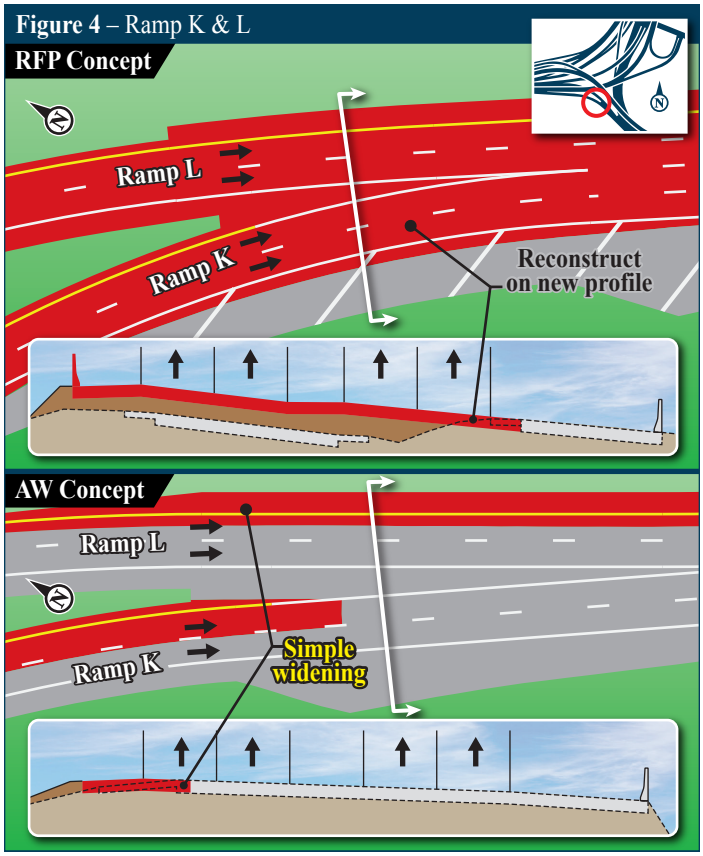


ATC #2 – Adjust the alignments of Ramp K and Ramp L in order to simplify construction and reduce impacts to traffic

A major goal of this project is to improve operations between eastbound (EB) I-10 and SB I-95 by widening Ramp K (I-10 EB Outer to I-95 SB) to two lanes and adding lanes to SB I-95 to improve flow ***(See Figure 4 on the following page)***. The AW Team's concept:

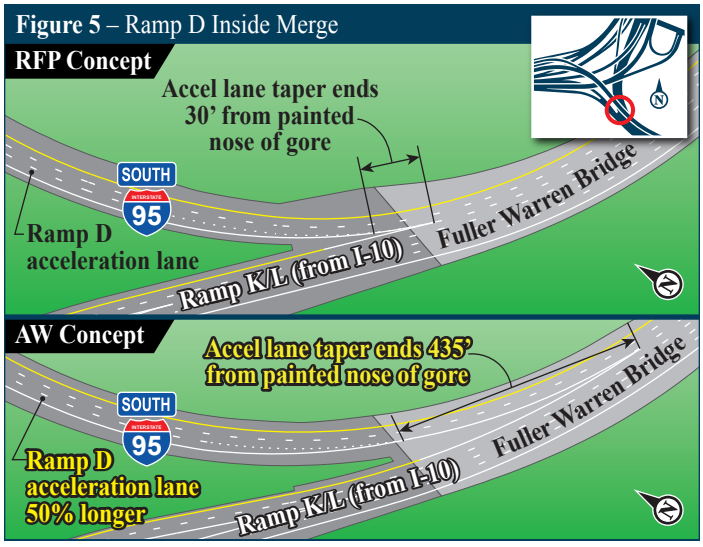
- Reduces impacts by eliminating the full reconstruction of Ramp K and L required by the RFP concept. The AW Team's approach of simple widening dramatically reduces impacts to motorists during this heavy "rush hour" movement.
- Improves constructability by maintaining the existing profile of Ramp L. In comparison, the RFP design requires a significant length of Ramp L (I-10 EB Inner to I-95 SB) to be reconstructed on a new profile to meet design criteria for the ramp terminal. The AW Team avoids reconstruction by adjusting the alignment of Ramp L and shifting the location of the gore so that the ramp terminal may be constructed with simple widening.
- Reduces costs by maximizing the use of existing pavement instead of replacing it, reducing construction time and preserving prior investments made in the construction of the "Big I".

Figure 4 – Ramp K & L



- Improves operations on Ramp D (SB CD Road to SB I-95) by optimizing geometry. In the RFP concept, the merge taper at the end of the acceleration lane terminates 30' from the painted nose of the gore where Ramp K/L enters I-95 SB. The AW Team has adjusted the alignments so that not only is the full width Ramp D acceleration lane made nearly 50% longer, but the merge taper at the end of the acceleration lane terminates 435' from the painted nose of the gore with Ramp K/L. This innovation improves safety and operations by increasing the distance between I-95 entrance points by 405' ***(See Figure 5)***.

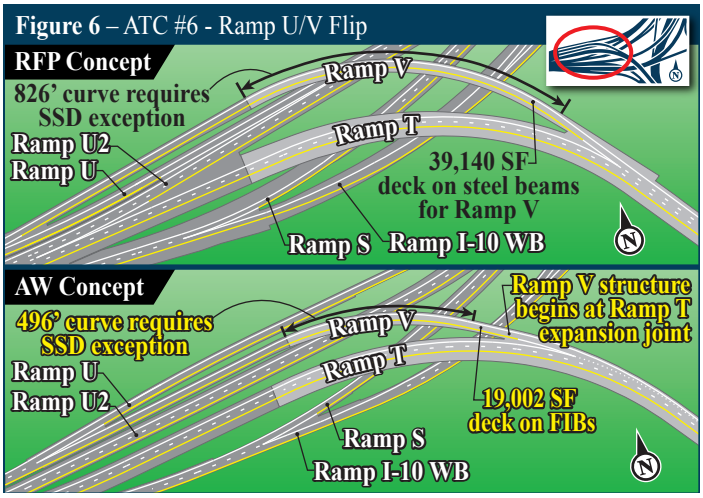
Figure 5 – Ramp D Inside Merge



ATC #6 – Modification to Ramps U, U2 and V - "Ramp Flip"

A primary project goal is to address weaving issues that currently exist between traffic coming from NB and SB I-95 going to I-10 WB and US 17. The RFP concept accomplishes this by constructing a new off ramp (Ramp V) for I-95 NB traffic to Stockton St. on the outside of the existing Ramp U which brings I-95 SB CD traffic to Stockton St. This permits traffic from I-95 SB/CD to be properly aligned to go to I-10 WB and US 17. The AW Team developed ATC #6 that modifies the proposed ramp alignments, essentially "flipping" Ramps U and V and solving the

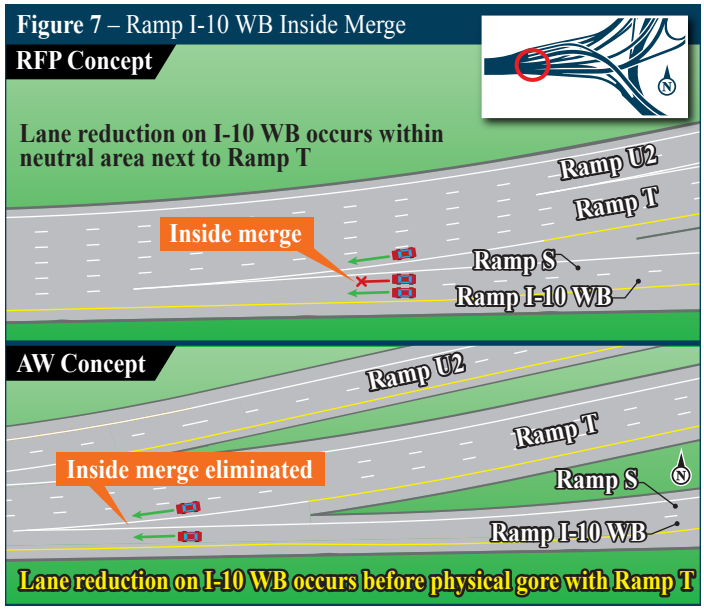
Figure 6 – ATC #6 - Ramp U/V Flip



weave issue ***(See Figure 6)***. This ATC also improves safety and operations and reduces costs by:

- Reducing the length of the Ramp V flyover by more than 300' (12,121 SF), saving both construction and future maintenance costs
- Facilitating the use of concrete FIBs in lieu of steel girders for the Ramp V Bridge (moving the split from Ramp T to an expansion joint) reducing construction and maintenance costs
- Reducing the limits of the Stopping Sight Distance (SSD) Design Exception by 50%
- Modifying the alignment of Ramp V, eliminating the need for construction of a 4th lane on the Ramp T flyover and the associated vertical clearance issues over Ramp A2 (I-10 EB to NB CD Road)
- Making the interchange more intuitive, providing a definitive break in the right edge line for traffic exiting Ramp T to Ramp V. This will reduce the potential for motorists to inadvertently exit the through roadway (per AASHTO Green Book, page 10-120).
- Eliminating the inside merge created by the RFP concept, where traffic from Forest St and the I-10 WB Ramp narrow to one lane within the limits of the Ramp T gore ***(See Figure 7)***. This creates the potential for a driver in the right lane of Ramp S (SB CD to US 17) to be "sandwiched" between drivers merging in from the left (from Forest St) and the Ramp T flyover on the right. The AW Team has modified the geometry so that Ramp S narrows to one lane ahead of the gore with Ramp T, eliminating this condition and greatly improving safety.

Figure 7 – Ramp I-10 WB Inside Merge

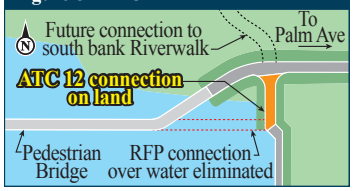


ATC #12 - Alternative alignment for the shared use path connection adjacent to the Nemours Children's Clinic

This ATC modifies the alignment for the shared-use path connection from Nemour's Children's Clinic to the new pedestrian bridge by constructing sidewalk on land instead of a multi-span bridge structure as

proposed in the RFP Concept. This ATC also proposes the use of a single span flat slab structure under Ramp A with sloped fill protected by rubble rip-rap ***(See Figure 8)***.

Figure 8 – ATC #12



This ATC provides the required direct connectivity while:

- Reducing the total length of bridge
- Eliminating the need for large cranes to install drilled shafts and erect beams in the water
- Maintaining the existing seawall elevation in front of Nemour's Clinic

ATC #3 – Use of Micropiles in low headroom conditions

This ATC allows for the use of micropiles as an alternate bridge foundation element, providing the AW Team and the Department with additional flexibility where deep bridge foundations might need to be installed in low headroom conditions. As a condition of acceptance, we have included a project specific Micropile TSP in Section 2 of this proposal. Other conditions of ATC acceptance were related to incorporation of micropiles into strengthening of Ramp T Pier 8 and 9 foundations. We do not need to strengthen existing pier foundations.

Partnering to Meet the Project Budget

During the ATC process, the AW Team presented numerous cost saving opportunities to assist the Department in meeting the project's budgetary goals. Several of these items ultimately resulted in amendments to the RFP and will provide cost savings to the Department, including:

- ***AW ATC #4 –*** The AW Team proposed shifting the pedestrian path pier at STA 330+90 to the west, placing this pier on land in lieu of in the water. This approach eliminates the need for ship impact or seawall modifications, reducing the overall construction cost, waterway impacts, contract time, and reduce long term maintenance
- ***AW ATC Meeting #2 –*** Our Team presented options to replace the proposed LED lighting embedded in the Pedestrian Path railing with a more conventional lighting design
- ***AW Cost Savings presented in marketing meetings –*** Our concept extended the existing fender system for new piers in lieu of full fender replacement
- ***Under previous procurement –*** The AW Team investigated the existing outfall systems crossing Riverside Ave and as a result, eliminated a 42″ jack and bore and replacement of 3 large storm pipes under Riverside Ave.

Roadway Design

In addition to the items described earlier, the I-10 EB lanes will be restriped to improve traffic flow east of US 17. The single lane ramp that provides access to I-95 SB from US 17 (Ramp K) will be widened to two lanes, and I-95 SB will be widened by one lane between I-10 and the Overland Bridge project. This widening, which occurs on the Fuller Warren Bridge, will include a 12′ wide shared-use path from Riverside Ave to San Marco Blvd.

As shown in the RFP Concept plans, the I-95 NB to I-10 WB flyover ramp (Ramp T) will be widened to three lanes to increase capacity. The I-95 NB option lane created by the widening will reduce lane changes on the Fuller Warren Bridge and improve traffic flow from the Overland Bridge project to and through "The Big I" Interchange. This added lane will be striped out initially as part of this project and opened when the future I-10 WB widening is complete.

Drainage Design and Permitting

The AW Team is aware that USACE and SJRWMD ERP 18228-14 was received by the Department on September 4, 2015; our Team assumes full responsibility to acquire any permit extensions and to modify existing permits as needed to address changes to final design.

Stormwater treatment and attenuation for the increased impervious area will be provided in the pond locations depicted in Appendix G of the RFP. The AW Team understands that this project will remove Ponds 3A, 3B and 3C on the west side of the Fuller Warren Bridge, and that compensating water quality and nutrient removal will be provided through expansion of the Overland Bridge Pond A, modification to the Pond E control structure, and adding ditch block retention in the swales that convey water to Pond E (ERP 81394).

The AW Team's proposed drainage system eliminates existing Pond 1 adjacent to the FDOT Urban Office parking lot. Through modification of the existing control structure, this stormwater runoff can be conveyed to Pond E for treatment and attenuation. Benefits include:

- Elimination of maintenance requirements for Pond 1
- Reduction of FDOT discharge into City's aging storm sewer system
- Reduction of discharge into flood-prone McCoy's Creek

Structures Design

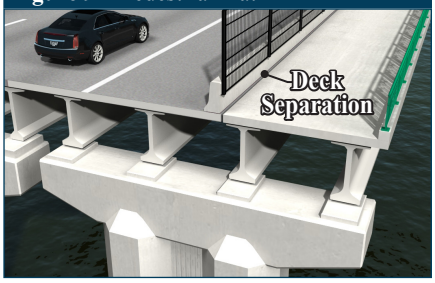
Fuller Warren Bridge Widening and Pedestrian Bridge Foundation/Substructure. Drilled Shaft Foundations will be utilized for piers in the water that will support the proposed Fuller Warren Bridge widening and the Pedestrian Bridge. On land, the pedestrian bridge will be supported on spread footers where permitted by the RFP in order to minimize noise and vibration impacts. As a result of our ATC #4 submissions, Addendum 2 was issued that allows for an optional pier location at approximately STA 331+17.00 behind the existing seawall. A drilled shaft foundation will be constructed there without the need for ship impact or seawall modifications. This reduces the overall construction costs, waterway impacts, contract time, and long term maintenance.

The piers in the St. Johns River are subject to significant scour and ship impact risks due to the meander of the river and abundant marine traffic. All existing and proposed foundations will be evaluated and designed to address scour and meet ship impact demands as specified in the RFP. Our new foundations will be attached to the existing foundations where possible to provide the most efficient structural system.

The pedestrian bridge profile was developed to optimize the support of both structures from a single hammerhead pier, match the existing structure, and meet RFP aesthetics requirements. The profile provides 17'-6" minimum vertical clearance over Riverside Drive and includes a relief landing at the turnaround meeting ADA and design vehicle access requirements.

Superstructure – Approach Spans. The AW design uses cast-in-place decking atop Florida I-Beams (FIBs), providing straightforward design, efficient construction and low maintenance costs. The AW Team proposes to construct separate decks for the Fuller Warren Bridge Widening and the Pedestrian Bridge. This will eliminate vibration effects from traffic and will reduce long-term maintenance by eliminating the risk of deck cracking between the two structures ***(See Figure 9)***.

Figure 9 – Pedestrian Path



Superstructure – Main Channel Span. This 3-span, post-tensioned spliced girder unit will utilize modified FIB forms and flexible filler replaceable tendons. Members of the AW Team have worked closely with FDOT staff to develop the details related to this new post tensioning methodology and are intimately familiar with the recently implemented specifications that will be utilized. This technology eliminates the corrosion issues the Department has experienced with conventional grouts, and facilitates strand replacement/modification if ever deemed necessary. Prior to post tensioning, the beam segments will be shored from existing pier footings which will reduce river impacts.

Fender System. In lieu of full fender replacement, the AW Team proposed that the existing fender system be left in place and extended in-kind to

provide ship impact protection. This enhancement was ultimately added to the RFP, improving constructability, lessening environmental impacts, and reducing costs.

I-10 / I-95 Interchange

The AW Team worked extensively with the Department to secure approval of ATC #1, which allows the Ramp T bridge to be widened while preserving the existing I-95 bridges and roadway alignment. This innovative ATC converts existing Piers 8 and 9 to straddle bents, significantly reducing construction time and impacts to the traveling public.

Employing sophisticated staged modeling and analysis, our Team has developed a concept that uses the existing hammerhead piers and a new column to the west to support a steel straddle pier cap. The new column will be fluted similar to the existing pier, arched decorative features will be added, and the pier and cap will be painted to match existing pier aesthetics. ***(See Figure 10)***

Figure 10 – Piers 8 & 9

The pier modification changes the structural system from a hammerhead (vertical cantilever) to a straddle pier (portal frame). The straddle configuration provides additional sidesway resistance. This reduces lateral and unbalanced live load effects on the existing pier components, offsetting the effects of the widening loads and eliminating the need for strengthening of the existing hammerhead pier.

Our final design will address all applicable FDOT and AASHTO limit-states and other related design criteria as specified in the Governing Regulations. This will include the effects of soil-structure interaction, relative pier stiffness and bearing fixity conditions. Staged analysis of existing and locked in loads in combination with the new loads on the existing structure, and the requirements of Structures Design Guidelines (SDG) 3.10 will also be addressed.

At the remaining Ramp T pier locations, the widening will be supported on conventional hammerhead piers. Pier footings located in Pond E will be constructed within temporary cofferdams.

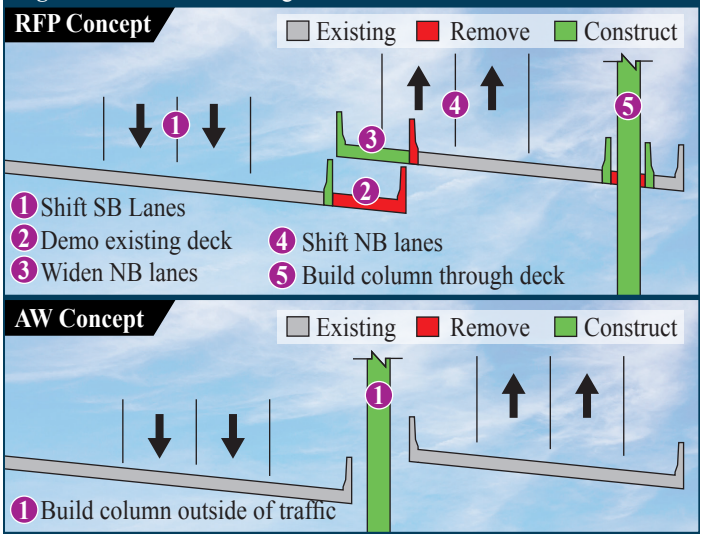
The AW Team's approved ATC #6 provides a simplified and more efficient alignment of the Ramp T and Ramp V structures. This provides benefits that include simplified steel detailing and fabrication, increased vertical clearance over the Ramp A2 bridge, and an overall reduction in construction time and cost to the Department. This ATC reduces the area of the Ramp V structure by more that 39% or 12,121 SF. The use of low cost, low maintenance Florida-I Beams and reduced bridge area further benefits the Department by lowering initial construction and future maintenance costs.

Maintenance of Traffic

The AW Team fully understands how important the "Big I" Interchange is to the regional highway system and have accordingly focused our ATC development on the reduction of traffic impacts. One such example is ATC #1, which eliminates major bridge and roadway modifications on I-95.

As shown in ***Figure 11,*** the RFP concept requires several traffic shifts and major modification of the I-95 bridges over College St before Ramp T widening can begin. These shifts include tight curves without shoulders that have extremely limited sight distance. ATC #1 allows I-95 traffic to remain in its current configuration, eliminating the full reconstruction required by the RFP concept and the associated sight distance and safety issues noted above.

Figure 11 – I-95 over College St



Similarly, the AW Team's ATC #2 minimizes traffic impacts by eliminating the reconstruction of Ramp L (I-10 EB Inner to I-95 SB) shown in the RFP concept ***(See Figure 4 on page 3)***. This two lane ramp is a critical link for the morning rush hour, and the traffic shifts required to build the RFP concept will be time consuming and a major impact to traffic. The modifications made by ATC #2 allow the work to be completed quickly through simple widening and allow the AW Team to shift EB I-10 lanes to their final location early in construction. Our Team will also open the additional Ramp K lane to traffic as soon as it is complete.

The RFP allows for closure of the I-95 NB and SB ramps to Stockton St while Ramps U, U2 and V are built. The AW Team's ATC #6 greatly shortens the duration of this closure by reducing the length of the Ramp V bridge and MSE wall construction, again limiting impacts to the travelling public.

The widening of the Fuller Warren Bridge will be completed in two phases. In Phase 1, SB traffic will be shifted toward the median barrier and the structure will be widened behind temporary barrier wall. The existing median lights will provide lighting during construction. In Phase 2, SB traffic will be shifted to the newly widened portions of the bridge and the new median wall will be installed. The existing median wall and lighting will remain in place and operational while the new wall is built. When the new wall and new median lights are complete the existing median wall and lights will be removed.

In addition to maintenance of traffic, the AW Team will provide for maintenance of navigation on the St Johns River. This will include close coordination of major construction activities over the main channel with the Coast Guard and other authorities. The AW Team will also maintain pedestrian access along local roads affected by construction. Sidewalks will only be closed when absolutely necessary and not be closed on both sides of a street at the same time.

Aesthetics and Amenities

Proposed piers, walls, beams and girders will be consistent in suitability, type, shape, proportion and form throughout the limits of the project. There are multiple aesthetic commitments made under RFP Appendices M and Q that will be adhered to in detail. The AW Team is cognizant of the City's efforts in establishing design continuity of the Riverwalk extensions and in the ultimate vision agreed upon by the local community and is committed to upholding these goals within our final design.

Geotechnical

Geotechnical Investigation Plan. Our Design Team has thoroughly reviewed the RFP and the provided geotechnical data to make a preliminary assessment of the subsurface conditions within the project area. Based on this review and our Team's vast geotechnical experience in the area, we developed a complete supplemental geotechnical investigation plan which will be performed during the design phase to provide the assurance that all work is performed in accordance with FDOT and FHWA requirements as well as all requirements in the RFP, including Section VI.C. This approach will allow our Team to take full responsibility for the geotechnical design.

Due to vibration sensitive areas along the project corridor and as required by the RFP, our geotechnical design will include drilled shaft foundations. We will utilize the FB Deep program as well as the previous Statnamic testing performed on the Overland Project to determine shaft length. Additional Statnamic testing will be performed to verify shaft diameter/ length. The SPT borings will be located so they can also be utilized as design and pilot borings.

Ground Improvement Plan. We have reviewed over 100 borings from various sources including those provided with the RFP, our previous I-95 Overland Improvement borings and the previous geotechnical information performed for the widening of the Fuller Warren Bridge from 1992. Due to the fill associated with some of the improvements for this current project, pre-loading of the sandy soils is anticipated in order to allow the settlements to dissipate. In addition, some isolated areas of near surface muck was encountered which will be removed in accordance with Standard Index 500.

Test Load Program. As part of the Overland Bridge Project three (3) Statnamic tests were performed on drilled shafts including one in the St. Johns River within the limits of this project. In addition, we have also performed PDA on over 100 piles as part of the Overland Bridge Project. In order to determine pile/shaft lengths we will utilize the previous testing information and perform additional PDA testing and Statnamic testing in accordance with FDOT requirements. Installation of the foundations will be supervised by the geotechnical foundation design engineer of record. In addition, all foundation installation will be monitored by a certified CTQP inspector. Upon completion of each bent/ pier, a foundation certification letter will be provided by the geotechnical foundation engineer of record.

Environmental Permitting

The project will impact jurisdictional surface waters requiring permits from SJRWMD and USACE. A USCG permit for work in and over the river will also be required. Our proposed design will require a permit modification and we understand this is the responsibility of the AW Team.

Signing & Pavement Marking, Signals, Lighting & ITS

Signing & Pavement Markings. The AW Team will continue our coordination efforts with the Department and the adjacent projects to provide adequate advanced guide/informational signage that manage all movements. We will seek to place all signs on EB I-10 west of US 17 in locations that are compatible with the ultimate express lanes, avoiding future sign relocations. Our signing plan included in Section 2 of this proposal complies with all requirements of Appendix K of the RFP.

Signalization. The proposed improvements will enhance pedestrian access by installing countdown pedestrian signals at the intersections of Stockton St/Rosselle St/ Ramp J and at Riverside Ave/Peninsular Place. A new pedestrian signal will also be added at the proposed crosswalk located on the east side of the intersection at Riverside Ave/Peninsular Place. Signal controller assemblies and fiber optic interconnection will be added in accordance with the RFP.

Lighting. Conventional lighting will supplement high mast lights within the interchange and as required on the Fuller Warren Bridge, pedestrian bridge, and approaching roadways. Lighting in the new parking lot on the west side of Riverside Ave will utilize City Historic standard poles and fixtures. Architectural lighting for bridge piers will also be included, as will the replacement of existing high mast luminaries with LED fixtures. The AW Team will maintain lighting during all phases of construction, using temporary lighting if necessary.

In lieu of LED lighting embedded in the pedestrian bridge railings, the AW Team proposed the use of conventional lighting during our ATC presentations. This modification was ultimately incorporated in the RFP, improving constructability and reducing costs.

ITS. ITS design will maintain the existing SunGuide system operations during construction to minimize downtime for cutover from the existing fiber network to the proposed fiber network and enhance the device coverage throughout the project limits. The proposed fiber optic communications will be spliced to the existing fiber network at the north, south and west ends of the project. Additional CCTV cameras and MVDS units will be installed to meet RFP mandated project surveillance and detection requirements.

We will provide the Department video from the proposed camera locations to verify coverage along the interstate mainline and cross streets. All proposed camera poles will have lowering devices installed, and sign structures will be used for devices mounted on bridge and ramp structures.

Fiber and power service will be installed in barrier wall conduit, with rigid structure conduit installed for device drops. We will coordinate the ITS and lighting conduit and power service routing on the Fuller Warren Bridge to minimize conductor sizes and the associated maintenance costs.

Our Team has as strong understanding of the future express lanes concept along I-10, and we will work with the Department to locate proposed ITS systems and devices so they will not conflict with future work.

Coordination - A Team with a Plan and Proven Results

Design Coordination. The AW Team has worked collaboratively for nearly two years in the development of ATCs, this Technical Proposal, and conceptual design plans for this interchange. We have conducted intensive weekly workshop sessions to optimize interchange alignments and profiles while simplifying maintenance of traffic, structures, drainage systems, and roadway construction. As we have done on all of our District 2 DB projects (including the directly adjacent Overland Bridge Project), we will work closely with the FDOT Management Team, including design manager Craig Teal, his staff, and FDOT construction management (including the Eisman and Russo CEI team).

We will work alongside Department staff to prioritize design submittals and component plan approvals. Immediately upon NTP, we will submit a detailed design schedule and review it with the FDOT team so that reviews and meetings can be well planned in advance. We will focus on issue resolution at all levels, striving to keep the project moving forward without delay or sacrificing quality. Weekly progress meetings conducted throughout the proposal process will continue through design and construction, expediting resolution of design issues. We will actively support FDOT during public meetings and assist in all public outreach activities as needed, and demonstrate how our plan meets all commitments on this high-profile project.

Design Coordination that minimizes relocation of utilities. The AW Team has begun the utility coordination process, met with all impacted Utility Agencies/Owners (UAOs) and developed a preliminary Utility Conflict Matrix (included on Page 33 of the preliminary plans in Section 2). Coordination efforts and relocation work will be scheduled early and will run concurrently with design and construction in order to avoid project delays. Prior to preparing utility work schedules, agreements, and certifications, our assigned Utility Coordination Manager (John Murphy) will hold field meetings and one-on-one conflict resolution meetings with UAOs. We will explore design options that

avoid relocation of utilities first and quickly coordinate relocation plans if needed within the boundaries of the construction schedule. The AW Team's efforts to minimize relocation of utilities include:

- Adjusting sound barrier wall alignments to avoid utilities noted in utility conflict matrix
- Locating the new column for the Ramp T Pier 8 straddle bent to avoid the AT&T Florida duct crossing I-95
- Removing the 42" Jack and Bore and reconstruction of existing large diameter storm drains that caused several potential utility conflicts along Riverside Ave and the public parking area. This innovation was proposed during the previous procurement of this project and has since been incorporated into the RFP.
- Utilizing spread footers for the pedestrian bridge columns adjacent to Riverside Ave, eliminating relocation of the 12" water main at this location

Construction Coordination Plan Minimizing Design Changes. The AW Team has repeatedly demonstrated how our internal coordination and collaboration avoids design and construction issues. In the past six years, AW and GAI have teamed on ten significant FDOT Design Build projects. The Keys to our Coordination Plan include:

- Critical component pre-bid design development - The AW Team worked to identify and fully develop design components which represent the highest risk for changes during construction, addressing that risk within our design and construction plan.
- Design task meetings with the District 2 Team - In addition to RFP requirements, the AW Team will maintain continuous interaction with our FDOT design partners throughout project plan development.
- Constructability reviews – Integrated constructability reviews between design and construction are completed prior to any submission of design submittals.
- Component Plans married to project schedule - Plan component submittals will align with the actual construction schedule, focusing on delivery of specific plan groups to maintain field progress.

Design Considerations that Minimize Impacts to Adjacent Properties and Structures

The AW Team's involvement on the Overland Bridge Project makes us keenly aware of the critical stakeholders adjacent to this project, including the Baptist Medical Center & Wolfson Children Hospital, Nemours Children Clinic, American Red Cross, Black Knight Financial Services, Levenson Eye Association, numerous Churches, Gateway Community Services, Annie Lytle Elementary School Building and of course FDOT facilities. Impacts to these stakeholders are minimized by:

- Using drilled shaft foundations on the Fuller Warren Bridge and Spread Footers for the Pedestrian Bridge (where permitted)
- Implementing an erosion control plan that eliminates impacts to adjacent waterways and properties
- Reducing construction duration and the associated impacts to adjacent communities and the traveling public through implementation of ATC #1, ATC #2, and ATC #6
- Moving pile driving activities (and associated vibrations) further away from the historic masonry schoolhouse as a result of ATC #1
- Reducing work within water and improving viewshed from Nemours through application of ATC #12

Design Considerations that Reduce the Intensity and Duration of Noise and Vibrations

Some examples include:

- Combining ATC #1 and ATC #2 to eliminate over 7,000 SY of concrete pavement construction and 31,927 SF of bridge, reducing the associated noise and vibrations
- Eliminating 12,121 SF of bridge construction on Ramp V and 8,530 SF of bridge construction on Ramp T and the associated noise and vibrations by using ATC #6
- Reducing the number of foundations and associated piles from the RFP concept
- Separating the pedestrian bridge from the main Fuller Warren Bridge decking to reduce walkway vibration
- Using drilled shafts and spread footers (where permissible) to eliminate the impacts of driven piles
- Reducing total road and bridge construction, streamlining the project schedule and associated impacts to the community

Designing to Minimize Routine Maintenance

The AW Team's design includes:

- Reinforced Concrete Pipe (RCP) for all proposed direct buried storm sewer
- Concrete FIBs in lieu of steel girders on Ramp V structure
- Miscellaneous asphalt or ditch pavement in areas with limited access around bridges and guardrails
- Quality materials and workmanship as indicated under our innovation section
- 6,000 PSI concrete for Fuller Warren drilled shafts to reduce permeability and extend service life

CONSTRUCTION

With a project of this size and complexity, a well-prepared and coordinated construction plan is absolutely necessary to ensure the project is completed safely, on-time, and with a high-level of quality. AW has successfully constructed many projects with similar conditions within District 2 and throughout Florida. Between the current I-95 Overland Bridge DB project and the award winning I-10/I-95 "Big I" Interchange project, our Team has unparalleled experience and knowledge of this project. Additionally, the CEI for this project will be Eisman and Russo, with whom we are currently working on the I-95 Overland Bridge. We will continue the same outstanding quality and relationships into the I-10/I-95 Interchange Operational Improvements, resulting in another highly successful project for District 2.

Construction Approach

Roadway Construction

Early Works. The AW Team will coordinate our design submittals in order to begin construction on critical early work items (permitting, MOT, clearing and grubbing/rough grading) as soon as possible after NTP. We will complete the early work of the project, such as pre-construction surveys of adjacent properties, install advanced warning signs and erosion control, designate safe ingress/egress points to the project, and complete clearing and grubbing of areas outside of traffic.

Earthwork, MSE Walls, and Drainage. During embankment activities, we will monitor vibration to ensure that it is not only below allowable thresholds, but as low as possible, especially near the numerous medical offices. Active measures, such as adjusting the frequency of our vibratory rollers to reduce vibration effects, will be implemented. Prior to trenching or excavating for pipes/structures and ponds, we will establish a work plan that addresses potential utility conflicts, safety needs, and dewatering requirements. In areas near residences, dewatering pumps will use shields to reduce noise impacts.

Concrete Pavement. AW has constructed more than 6,000,000 SY of concrete pavement in the past eight years, including placement in this exact interchange. We intend to utilize the same paving superintendent and crews that have extensive local experience (I-10/I-95, Overland Bridge and SR 9B Phase 1) to provide a continuity of experienced labor, equipment, and materials, and allowing placement of high-quality concrete pavement at an accelerated pace. Similar to how we constructed the "Big I", we anticipate hand forming the concrete pavement. This is due to the pavement design (concrete trucks cannot run on the permeable fill), the space constraints of the project, and the small quantity to be constructed.

Noise Walls. Noise walls are primarily barrier wall mounted with some ground mounted walls. These walls will be part of our early design submittals, enabling us to construct them as early as possible to reduce

the impact to adjacent properties. Additional construction time savings can be realized utilizing precast traffic barrier sound walls in 30' sections.

Signs, Lighting, ITS. Existing lighting levels will be maintained during construction. Sign structure fabrication will not commence until as-built dimensions are established to ensure that proper fabrication is achieved and required clearances are met. We understand the need to maintain the operation of the existing ITS system and will coordinate within our Team to identify and resolve all possible conflicts. Once installation is complete, we will ensure that all stand alone, subsystem, and system tests are performed to the satisfaction of District 2.

Structure Construction

Fuller Warren Bridge Widening and Shared use Path/Marine Construction. We understand the critical nature of maintaining marine traffic on the St. Johns River at all times. As we will be using barges in and around the channel spans, we will only require limited times of short term channel closures (such as during beam setting). These activities will be coordinated closely with FDOT and the Coast Guard to ensure minimal disruptions. During construction, all floating equipment will have warning lights, and we will place buoys to block the work zone outside the channel, which has proven extremely successful on recent projects like Sisters Creek Bridge in District 2. We will utilize a combination of temporary trestle at each bank and barges for the majority of the bridge construction. Mooring dolphins will be installed away from the bridge to secure the barges in the event of a storm.

The *Standard Manatee Conditions for In-Water Work (2011)* provided in Appendix S shall be followed, including provision of qualified manatee observers during all in-water construction who shall have the authority to cease project operations when appropriate. We will also adhere to the Sea Turtle and Smalltooth Sawfish Construction Conditions provided by the National Marine Fisheries Service and will comply with all permit requirements related to Sturgeon, including the use of turbidity curtains during construction.

A detailed demolition plan will be developed showing how we intend to remove superstructure and substructure elements. As we have done on previous projects, we will utilize barges lined with sand under the bridge or other approved containment systems to catch any debris. We will perform a pre- and post-construction channel scan survey of the river to ensure no construction debris is left.

This project requires that permanent casing be utilized for the installation of drilled shafts and that this casing be installed utilizing an oscillator and/or rotator type equipment. This will provide the highest quality of the final in-place product and will eliminate the adverse effects of vibration to the existing bridge and local stakeholders. Archer Western has successfully performed similar drilled shaft installations on numerous water crossing projects. The equipment required to complete the foundations for this project are company-owned assets available and ready for mobilization.

The casing will be installed in advance of the shaft excavation, maintaining contact with the overburden granular soils to prevent these soils from infiltrating to the interior of the casing. Excavation of the shaft will be accomplished with a crane and clam shell bucket and/or a conventional drill rig. The oscillator/rotator will advance and seat the casing into the top rock, preventing soil intrusion. The rock socket will then be installed with a conventional drill rig. The shaft bottom will then be cleaned and inspected and reinforcing steel installed. Concrete will be placed utilizing tremie pouring methods with all displaced water and over pour being captured in a hopper barge.

The existing fender system will be extended due to the bridge widening and shared use path. The fender will be of in kind material meeting current design criteria. Fender extensions will be completed prior to the proposed Fuller Warren and Pedestrian Bridge construction, and staged to ensure a fender system is maintained at all times for marine safety and protection of the existing bridge.

Additional Bridge Construction. This project will include a combination of bridge widenings and new structures. Small work areas and lane closure restrictions will make proper planning and staging critical. Our experience working in this interchange (and widening bridges we previously constructed) will prove valuable on this project. We will survey existing structures prior to construction, and monitor vibration during construction to ensure no damage to existing bridges occur. Demolition methods on existing bridges to be widened will be planned to minimize damage to the existing rebar and bridge deck that we will be tying into.

Utilizing ATC #1, Ramp T will include two straddle bents that tie into the existing caps at piers 8 and 9. The foundations and columns for the new straddle piers will be constructed. Once complete, the steel straddle beams will be installed utilizing temporary supports at the existing columns. Once the permanent connections are made, the temporary supports will be removed and the superstructure work will be constructed.

Modular Joint Replacement. We will replace the joints on the existing Fuller Warren bridge in the area of the bridge widening per RFP requirements. We will follow the same procedure successfully implemented on our I-95 Overland Bridge project last year. This consists of replacing the joints one or two lanes at a time utilizing nighttime lane closures. Fast set concrete will be placed in order to reopen the lanes quickly.

AW Construction Project Goals

Worker Safety

Safety is our top priority on every project, and it is especially important on urban interchanges with heavily-traveled interstate roadways. AW's National Experience Modification Rating (EMR) is 0.63, demonstrating that we have 37% fewer worker compensation claim costs than the industry average. Several of the highlights of our construction approach to eliminate hazards and improve safety include:

- A full-time Safety Manager will be assigned to the project
- Site Specific Safety Plan (SSSP) – Addresses the requirements for working on a heavily-traveled interstate
- Pre-Activity Work Plans – From the SSSP, individual work plans that identify and resolve potential safety hazards
- Weekly and Monthly Toolbox Safety Meetings
- Lifelines will be placed on all beams prior to erection

Minimize Disruption to Traffic, Including Bicyclists and Pedestrians

Our ATC #1 allows us to construct the Ramp T widening without relocating the existing I-95 alignment, thus minimizing traffic shifts and overall impacts. Our phasing/MOT plan will ensure pedestrian and bicycle access is maintain at all time in accordance with Standard Indices.

During construction, it will be necessary to maintain signage, lighting, ITS and drainage. We will use as much as the existing infrastructure as possible as well as installing new systems as early as possible to minimize temporary devices. Additional efforts to minimize disruption to traffic include:

- Identifying construction access points to minimize construction vehicles entering or exiting the highways
- Providing acceleration/deceleration lanes for trucks for added safety
- Coordinating with FDOT and precast beam supplier to optimize delivery routes
- Keeping existing pedestrian and bicycle routes fully functional
- Minimizing traffic phases to improve driver expectancy and increase driver comfort
- Suspending construction during specified holidays and emergencies

Mitigate Impacts to Other Projects

Communication and proper planning are the primary elements in minimizing impacts to nearby projects. Archer Western has a proven track record in District 2 of coordination with adjacent projects, as recently demonstrated by our work with FDOT and CEI Eisman & Russo

on the I-95 Overland Bridge Project. In addition, GAI's history as CEI on numerous District 2 projects, including the "Big I", provides added experience with inter-project coordination. This will prove critical as we coordinate closely with the concurrent adjacent projects including the I-95 Overland Bridge (AW prime contractor), Edison Ave at McCoy's Creek Bridge Replacement, COJ Dog Park at Riverside Park and COJ Artist Walk Extension. Critical initiatives include:

- Proactive communication with CEI Eisman & Russo and FDOT to coordinate any lane closures/detours that may impact nearby projects
- Look-ahead schedules that are nearby project staff to inform them of upcoming activities

Minimize Impacts to Adjacent Properties & the Environment, Including Visual, Noise, Vibration, and Dust Impacts

AW is committed to protecting the environment and being good neighbors to local communities and businesses. AW will hold workshops with our employees and permitting agencies to review the project requirements and ensure that the proper means and methods are utilized to proactively prevent environmental violations. Additionally, we will:

- Develop a comprehensive Stormwater Pollution Prevention Plan in accordance with NPDES regulations
- Ensure all new hire and subcontractor orientations will include training on environmental protection
- Provide dedicated manatee observers per the RFP
- Utilize construction entrances/tracking devices, truck wheel washes and broom tractors/vacuum trucks on existing roadways
- Ensure we do not block access to stakeholder's driveways, including Black Knight Financial Services
- Survey and monitor existing structures
- Predrill for piles where necessary to reduce vibration associated with bridge foundation construction
- Install drilled shaft casings for the Fuller Warren bridge widening and shared use path using rotational or oscillator installation

Vibration and Settlement Monitoring. The AW Team has identified vibration-sensitive sites to minimize and avoid impacts to adjacent structures from construction activities, including the existing Baptist Medical Center & Wolfson Children Hospital, Nemours Children Clinic, American Red Cross, and Black Knight Financial Services. A Settlement and Vibration Monitoring Plan (SVMP) will be developed and submitted to FDOT as part of the 90% plans for approval. The SVMP will establish the maximum vibration levels not be exceeded and will be updated throughout the Construction Period. The determination of the maximum vibration levels will consider multiple factors including construction methods/procedures, soil type/density, location of vibration sensitive equipment and age of the structures. Pre and Post Construction surveys will be completed and vibrations associated with construction activities will be monitored during construction according to the SVMP.

Minimize or Eliminate Detours. While some temporary detours will be required during construction for public safety, we intend to keep these to a minimum. We are committed to:

- Closely adhering to all lane closure and detour requirements
- Utilizing approved detours in lieu of pacing
- Detouring traffic only in off-peak, nighttime hours (with the exception of the Stockton St ramp closure)

Minimize Impacts to Existing Utilities. The AW Team has extensive experience working with local utilities and has developed excellent relationships with these stakeholders. Our design minimizes impacts to utilities in order to reduce cost and schedule. Our Construction Project Manager, Heath Bunn, brings his extensive experience, local knowledge, and relationships with the UAOs on this project from his seven years of experience working in the area of this project. Coordination is the key to working with the affected UAOs and is critical to maintaining the project schedule. We will schedule our work with the intent to take utilities off of the critical path. During construction, Sunshine State One Call Tickets will be initiated, maintained, and logged. Where work will occur around existing utilities, we will soft dig to physically locate the utilities prior to beginning work. All JEA work will be performed by JEA approved subcontractors.

Schedule

AW has an excellent track record of finishing projects on time or ahead of schedule. Our detailed project schedule is logical, realistic and accounts for all key components. Our schedule also accounts for critical community commitments including construction improvements for RAM by November 1, 2017 and sidewalk construction at Nemours Children's Clinic within the last six months of the project.

Critical Path. As this will be an extremely fast paced project, proper identification of the critical path and application of sufficient resources are crucial in keeping these activities on track. Permitting and design submittal packages will be scheduled in a logical manner and to allow for early approval of "Release for Construction" sets consistent with AW construction phasing. Utility coordination efforts are scheduled to occur early in the design phase to reduce the potential for delays during construction.

Design and Permitting Phase. Immediately following award, the AW Team will begin working on typical section and pavement design packages, design submittals, and permit modifications in advance of the contract execution and issuance of Notice to Proceed (NTP). Upon NTP, we will immediately begin design survey, geotechnical investigations, and utility locates. We have prioritized the early works components (MOT, erosion control, clearing and grubbing/rough grading and noise walls). The structure design submittals will be broken into two component sets for each bridge; one for MSE Walls and foundations, and one for substructure and superstructure. This will facilitate early construction of critical walls and foundations while allowing additional time for the development of final substructure and superstructure components.

Construction Phase. Once RFC plans are approved and the required permits are in place, we will begin construction. Construction activities are primarily based on a 5-day work week to provide allowances for weather or acceleration by shifting to a 6- or 7-day work week as needed. Please refer to the previous sections and MOT Roll Plots for details regarding construction phasing.

INNOVATION

As is clearly evidenced in this technical proposal, the AW Team is singularly focused on bringing the best, most cost effective project to the Department and Florida's taxpayers. The collaborative nature of our Team fostered dozens of ideas, many of which made it into this proposal.

Innovations to minimize or eliminate utility relocations

- An optimized approach to drainage that reduces pipe replacements and avoids telecommunication and water/sewer lines
- Elimination of a 42″ jack and bore and the need to replace 3 large storm pipes under Riverside Ave and associated utility impacts
- Locating the new column for the Ramp T Pier 8 straddle bent to avoid the AT&T Florida duct crossing I-95
- Utilizing spread footers for the pedestrian bridge decorative columns adjacent to Riverside Ave eliminating relocation of the 12" water main at this location

Innovations related to materials

- Use of low-maintenance RCP for proposed direct buried storm pipes
- An aesthetics plan that meets all commitments using common maintenance materials
- Use of 6,000 PSI concrete for Fuller Warren drilled shafts that reduces permeability and extends service life
- Use of precast seal slabs for waterline footing construction increases bottom concrete cover on footings and results in better quality

Innovations related to workmanship for design and construction

ATC #1

- Allows construction of Ramp T improvements without shifting I-95 traffic, eliminating 11,000 SF bridge reconstruction/widening on I-95
- Eliminates removal of existing bridge deck to install pier

ATC #2

- Eliminates reconstruction of Ramp L and all associated traffic shifts
- Increases acceleration lengths and gore separation
- Preserves 4,620 SY of recently constructed concrete pavement

ATC #6

- Reduces length of Ramp V flyover, eliminating 12,121 SF (39%) of complex bridge construction
- Eliminates 8,530 SF of complex bridge widening on Ramp T
- Reduces the limits of SSD design exception by 50%
- Eliminates inside merge between Ramp S and T
- Uses concrete FIBs in lieu of steel

ATC #12

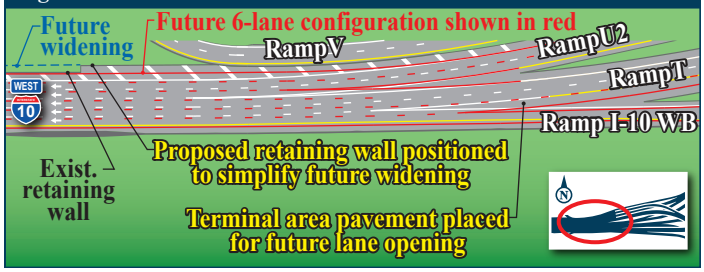
- Reduces the pedestrian bridge structure and Nemours sidewalk reconstruction

Innovations enhancing design and construction aspects related to future expansion of the transportation facility

Throughout the ATC process for both this proposal and the previous procurement, the AW Team has collaborated with the Department to assist in the on-going development of the future express lane alignment through the interchange. The AW Team has implemented several design innovations that will better prepare for the future expansion of this facility, including:

- Placing the wall between WB I-10 and Stockton St so that it may easily be extended in the next project ***(See Figure 12)***
- Building the terminal where Ramps T and S come together so that pavement reconstruction is avoided when the express lanes are built ***(See Figure 12)***
- Designing truss signs over EB I-10 to span the existing lanes and future express lanes
- Positioning ITS equipment so that it will not be impacted by express lane construction

Figure 12 – Future Wall Connection



Value Added Table				
Warranty item Required by the RFP – Broadening Extent	Duration (Years) Standard	AW	Threshold Level	Remedial Work
Value Added Bridge Components	5	8	Per Spec. 475	Per Spec. 475
Value Added Asphalt	3	5	Per Spec. 338	Per Spec. 338
Value Added Concrete Pavement	5	8	Per Spec. 355	Per Spec. 355
Additional Value Added By AW				
Signal Components – Spec. 645 and 611				
Signals	3	5	Per Spec. 645	Per Spec. 645
LED Lamps	1	3	Not Working	Replace
Painted Mast Arms	5	7	Per Spec. 611	Per Spec. 611
Roadway Features				
Signage	2	5	Cracks, welds, arms, or pole basis	*1,*6
Pavement Marking	2	3	Missing RPM > 20%	*1,*6
Guardrail	2	3	Per Spec. 536	*1,*2
Retaining Walls	2	7	Diff. Settlement > 4"	*1,*4
Drainage	2	7	Soil/Water Leak	*1,*5
Lighting				
All components except below	3	5	Per Spec. 645	Per Spec. 645
Lamps, ballasts, photo electric switches	2	3	Per Spec. 725	Per Spec. 725
LED luminaires and ballasts	5	5	Per Spec. 992	Per Spec. 992
Adhesion and color retention on painted poles and bracket arms	5	7	Per Spec. 725	Per Spec. 725
Additional Concrete & Steel Features				
Defects: approach slabs, substructure, superstructure	2	7	Spalls > 1" depth	*1,*3
Post tensioning	2	7	Spalling in and around anchor plates	*1
ITS - all components	varies	**	Per Spec. 783, 785, 786	Per Spec. 783, 785, 786

*1 - Work plans will be on a case-by-case basis
*2 - Repair/Replace element failing to function properly
*3 - Potential repairs: Patch spall with approved grout, epoxy inject cracks
*4 - Potential repairs: Remove, repair and/or replace panels
*5 - Potential repairs: Sealing joints and desilting
*6 - Potential repairs: Replace structure, repair welds
*7 - Replace missing RPMs
**1 year more than standard

VALUE ADDED

AW has a long history of providing high-quality, dedicated construction services to District 2. The AW Team's approach to maintainability involves emphasis on construction quality, design detailing that inherently reduces maintenance costs, and a comprehensive value added warranty program. When combined, these elements provide FDOT with a project of lasting quality requiring minimal maintenance. Our proposal to not only increase the duration of the base warranty period, but to expand the scope of the warranty is evidence of our confidence in the design and construction of this project. The ***Value Added Table*** to the right provides our extensive list of Broadened and Added Warranties.

CONCLUSION

The AW Team offers District 2 many advantages towards successfully completing the I-95/I-10 Operations Improvements Project:

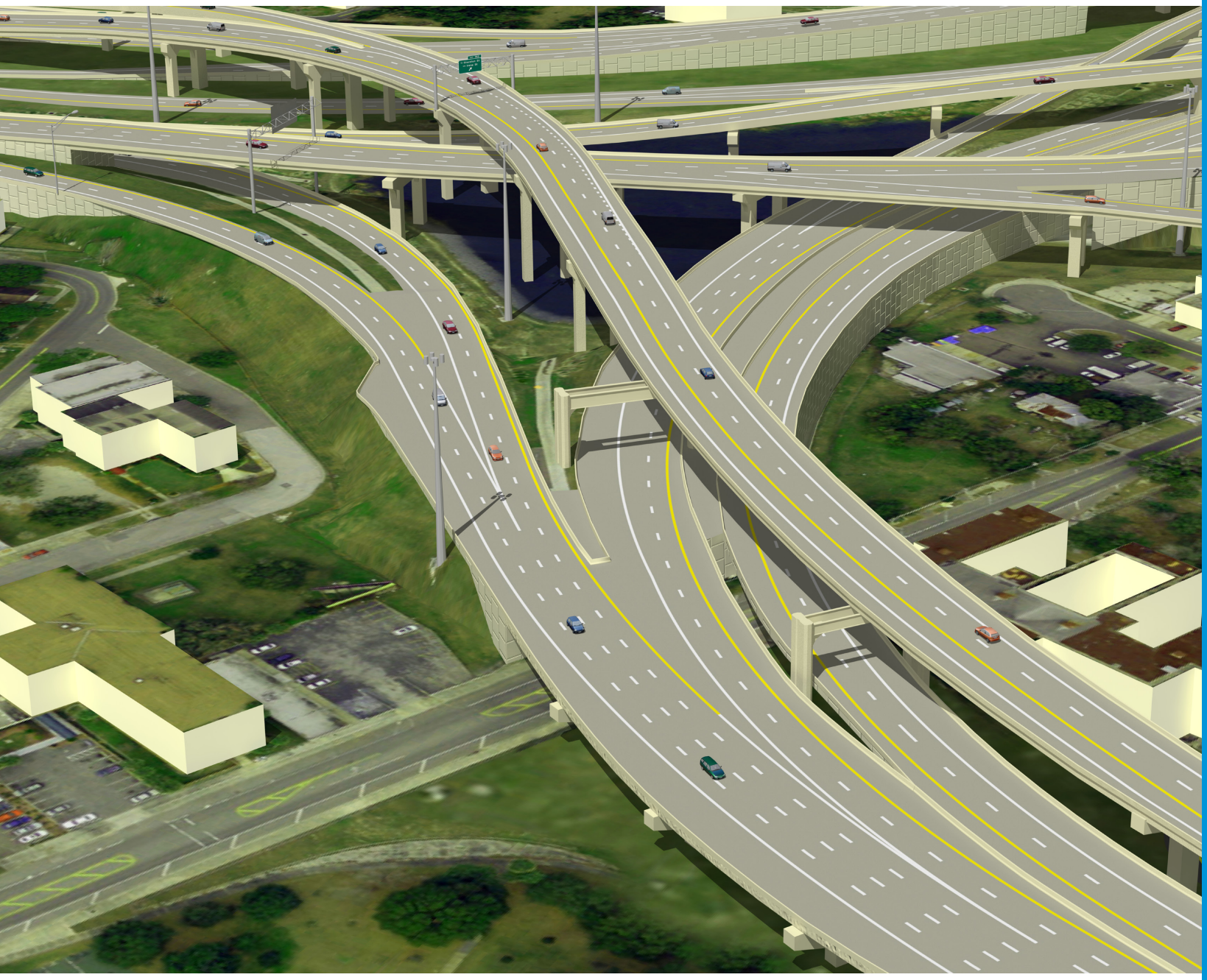
- District 2 can trust the AW Team to work cooperatively with you. Our Team has successfully completed multiple design-build projects for FDOT District 2, and our key management staff already has a strong working relationship with your leadership team. We have proven ability to successfully construct your large, complex projects.
- We will seamlessly interface with the I-95 Overland Bridge Project
- We will achieve all of the Department's RFP Commitments and exceed your Goals. Our alternate ATC alignments efficiently achieves all of the RFP Commitments while improving operations beyond the RFP concept, Adding Value and Preparing for the Future.
- We will continue our proven ability to engage all project stakeholders. As with all of our D2 DB projects, we will work side by side with FDOT to ensure this project is viewed as a success by all.
- We stand behind our work. By significantly increasing the Department's required warranties, as well as adding numerous warranty items, the AW Team demonstrates our quality of design and construction.

The AW Team looks forward to continuing our successful Design-Build Partnership with District 2!

Sincerely, Archer Western Contractors, LLC
Kevin McGlinchey | Business Group Leader

Section 2

Plans and Technical Special Provisions



Archer Western

gai consultants

PARSONS BRINCKERHOFF